

OneVizion

Simply Smarter Information Management

System Performance, DB Maintenance



1. Database Maintenance
 1. IOT reorganization
 2. Stats
2. Database Pruning Job
3. Tree Design impact on ancestor
4. Replication Database for reporting
 - 4.1. Materialized Views
5. Check SQL for upgrades

Topic: 1. Database Maintenance

- IOT rebuild
 - Ancestor
 - Config_Value_Date
 - Greater than 10 percent performance gain
- Database Statistics
 - Set to weekly automated

Topic: Database Pruning Job

Pkg_vqutils.cleanup_tmp_tables

- Written to be re-startable
- If you get behind in cleanup just let it run.

Topic: Database Pruning Job

Pkg_vqutils.cleanup_tmp_tables

- Audit_log_cflite where ts < 31 days
- Audit_log_tlite where ts < 31 days
- Blob_data records from notifications where notif_queue.created_ts < 10 days
- Tmp_file where ts < 2 days (download zip)
- Update running/inQueue reports over 1 day to error state
 - Make sure doesn't conflict with process that shoots long running reports
 - If reporting is down for some time...

Topic: Database Pruning Job

Pkg_vqutils.cleanup_tmp_tables

- Archive old exports and delete associated blob_data based on system parameter.

The screenshot shows the 'System Parameters' interface. At the top, there are icons for a bookmark and share, followed by the title 'System Parameters' and a settings icon with 'Unsaved View' and 'Unsaved Filter' options. Below this is a search bar containing the text 'archive' and a dropdown menu set to 'System Parameter'. The main content is a table with the following structure:

#	System Parameter	Value	Description
General (1)			
240	ArchiveOldExportsAfter	14	Archive Grid Exports older than X days. The default is 14 days

Topic: Database Pruning Job

Pkg_vqutils.cleanup_tmp_tables

- Xitor_audit set notif_processed = 1 where unprocessed and record_start_date < 7 days ago
- When usage_log.iis_start < 60 days ago, deletes associated records in
 - Ulog_filter_opt_attrib, ulog_filter_opt, ulog_view_opt_task_over, ulog_view_opt_map, ulog_view_opt_column, ulog_view_opt_sort_column, ulog_view_opt, usage_log_sql_param, usage_log_grid_filter, usage_log_sql_plan
- Usage_log sql, ws_request, not_limited_sql where iis_start between 70 days ago and 60 days ago.
 - These lob segments can get huge.
 - Based on logic, if you get too far behind, it will not get properly cleaned out.

Topic: Database Pruning Job

Pkg_vqutils.cleanup_tmp_tables

- Imp_run_grid_incr and imp_run_entity_pk based on imp_spec.days_to_keep_parsed_data
 - Update imp_spec set days_to_keep_parsed_data = 10 where days_to_keep_parsed_data is null
 - Since this table constantly insert and update the stats get old frequently
 - Recommendation: have all imports set to 10

Import - Import ID: 10009241 - General

Import Name *	import config fields		
External Procedure	pkg_ext_imp.ConfiguredFieldLoad(:RID);		
Actions *	Update, Insert/Update, Insi ...	Default Action	...
Data validation mode *	No Validation	Keep parsed data for	You will be unsubscribed from chat "{0}"
Line Delimiter *	<new line>	Date Format *	MM/DD/YYYY
Field Delimiter *	Comma	Time Format *	HH24:MI:SS
String Quote *	Double Quotes	Max runtime	minutes
Performance Feature (Beta)	<input type="checkbox"/>		
Description	<p>Imports Files of CSV format. Expected header: Components,Field,Label,Field ID,Label ID,Description,Data Type,Max Length,Field Width (px),Lines Qty,Multiple Lines,Read Only,Table Name,Delete</p> <p>Note: Components - is name of target xitor type, Data Type is one of: TEXT, NUMBER, DATE, CHECKBOX, DROP-DOWN MENU (or DROP-DOWN or DROPDOWN), MEMO, MULTISELECTOR (or ISELECTOR) Multiple Lines and Read Only one of NO, N, 0, YES, Y, 1 If Delete one of 'YES', 'Y', 'X', '1', 'DEL', 'DELETE' field will be deleted from db If field with same name for same xitor type already exists it will be updated otherwise created new</p>		

Topic: Database Pruning Job

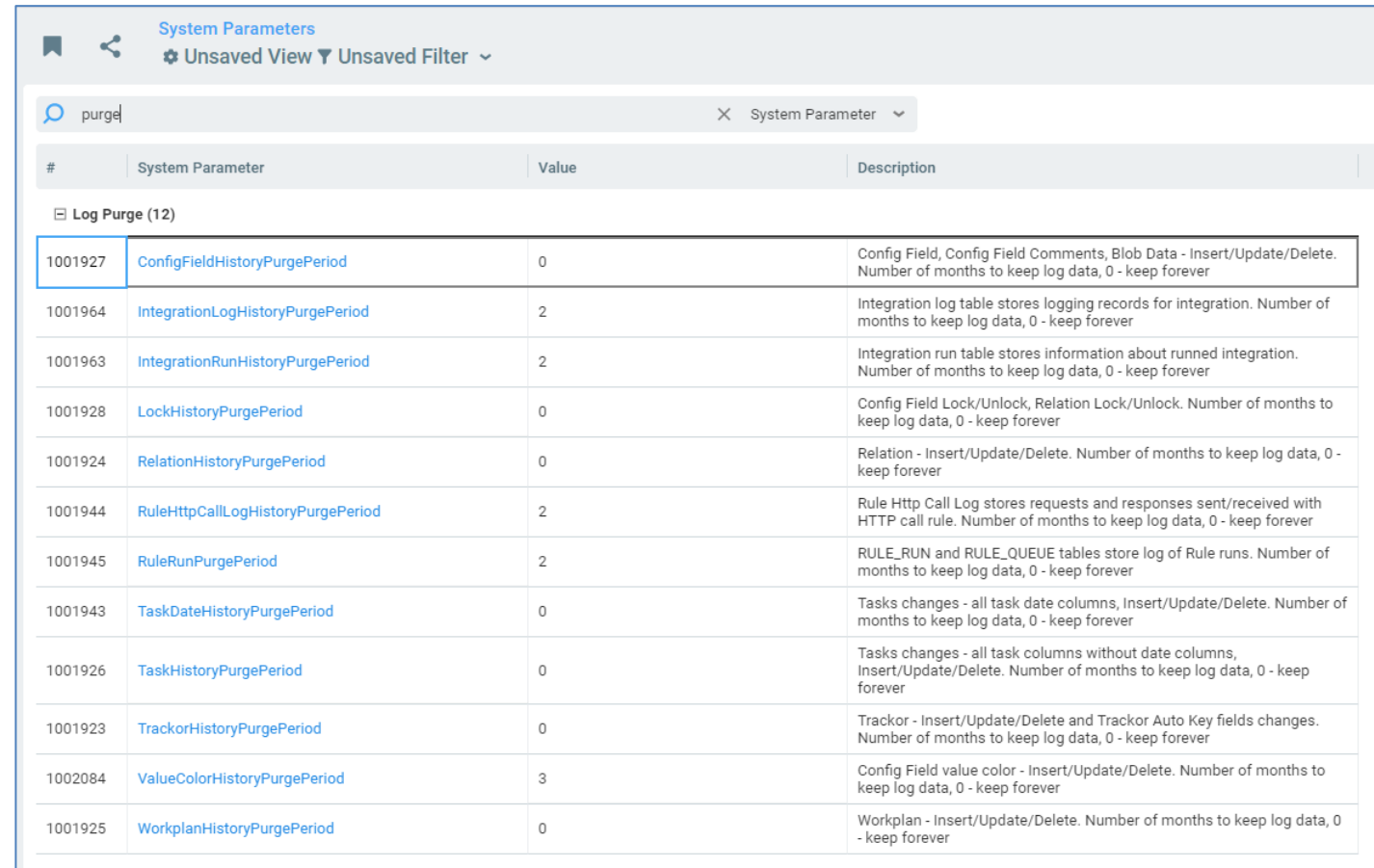
Pkg_vqutils.cleanup_tmp_tables

- Error_log where ts < 31 days ago
- Message where ts < 90 days ago
- Process_event where event was read and older that 2 days
- Process_event where user has more than 50 events
- Notif_processing_log older than 90 days

Topic: 2.1 Design/Model Data

Pkg_vqutils.cleanup_tmp_tables

- IntegrationRun, IntegrationLog, RuleHttpCallLog, RuleRun should be set to 2
- All the others are deleting from the audit_log.
 - Data in field history etc. will be permanently gone.
 - Should be set to zero.
 - Changing it to a non-zero value will bog down the procedure.



System Parameters
Unsaved View Unsaved Filter

purge System Parameter

#	System Parameter	Value	Description
Log Purge (12)			
1001927	ConfigFieldHistoryPurgePeriod	0	Config Field, Config Field Comments, Blob Data - Insert/Update/Delete. Number of months to keep log data, 0 - keep forever
1001964	IntegrationLogHistoryPurgePeriod	2	Integration log table stores logging records for integration. Number of months to keep log data, 0 - keep forever
1001963	IntegrationRunHistoryPurgePeriod	2	Integration run table stores information about runned integration. Number of months to keep log data, 0 - keep forever
1001928	LockHistoryPurgePeriod	0	Config Field Lock/Unlock, Relation Lock/Unlock. Number of months to keep log data, 0 - keep forever
1001924	RelationHistoryPurgePeriod	0	Relation - Insert/Update/Delete. Number of months to keep log data, 0 - keep forever
1001944	RuleHttpCallLogHistoryPurgePeriod	2	Rule Http Call Log stores requests and responses sent/received with HTTP call rule. Number of months to keep log data, 0 - keep forever
1001945	RuleRunPurgePeriod	2	RULE_RUN and RULE_QUEUE tables store log of Rule runs. Number of months to keep log data, 0 - keep forever
1001943	TaskDateHistoryPurgePeriod	0	Tasks changes - all task date columns, Insert/Update/Delete. Number of months to keep log data, 0 - keep forever
1001926	TaskHistoryPurgePeriod	0	Tasks changes - all task columns without date columns, Insert/Update/Delete. Number of months to keep log data, 0 - keep forever
1001923	TrackerHistoryPurgePeriod	0	Tracker - Insert/Update/Delete and Tracker Auto Key fields changes. Number of months to keep log data, 0 - keep forever
1002084	ValueColorHistoryPurgePeriod	3	Config Field value color - Insert/Update/Delete. Number of months to keep log data, 0 - keep forever
1001925	WorkplanHistoryPurgePeriod	0	Workplan - Insert/Update/Delete. Number of months to keep log data, 0 - keep forever

Topic: Reporting on App Server

- Starts process entry on main DB.
- Executes queries for report on reporting database.
- Records success / failure on main DB.

Topic: Replication Database with Materialized Views

Materialized Views

- Must be executed on main database.
- Results in significant less load on reporting database.
- Provides stability in reporting. Bean counts from minute to minute will not change as will reporting in OLTP.
- Need to make synonym in other schemas so that test sql on report admin and _rpt schema can access.

Topic: S3 Data Blob

SYNCS3 process

Since s3 is much less expensive than database storage, we move the file (BLOB) to s3 and remove from the database.

Topic: Check SQL for Upgrades

■ CheckSQL Tool

To assist in checking for invalid configurations, we have developed a tool called “CheckSQL”. This is freely available on GitHub here: <https://github.com/IKAMTeam/checksql>

This tool (a Java executable) allows an administrator with database access to check for syntax errors in:

1. CONFIG_FIELD
2. GRID_PAGE_FIELD
3. IMP_DATA_MAP
4. IMP_DATA_TYPE
5. IMP_DATA_TYPE_PARAM
6. IMP_ENTITY
7. IMP_ENTITY_REQ_FIELD
8. IMP_SPEC
9. NOTIF
10. REPORT_LOOKUP
11. REPORT_SQL
12. RULE
13. RULE_CLASS_PARAM
14. RULE_CLASS_PARAM_VALUE
15. RULE_TYPE
16. TM_SETUP
17. WF_STEP
18. WF_TEMPLATE_STEP

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OneVizion Documentation

For more information regarding these topics,
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Thank You